

**CLAIM AMENDMENTS**

1. (currently amended) A method for predicting pregnancy outcome in a human female subject comprising measuring the activity of MMP-9 matrix metalloproteinase-9 in the follicular fluid ~~from a follicle~~ of a matured oocyte and predicting from the activity of MMP-9 matrix metalloproteinase-9 measured the probability of establishing pregnancy.
2. (currently amended) ~~The method of diagnosing the chances of pregnancy of according to claim 1,~~ wherein the activity of MMP-9 matrix metalloproteinase-9 is measured by using zymography.
3. (currently amended) ~~The method of diagnosing the chances of pregnancy of according to claim 1,~~ wherein the diameter of the follicles selected is not less than 17mm.
4. (original) The method according to claim 1, which further comprises obtaining said follicular fluid from said follicle of said mature oocyte.
5. (currently amended) A method for predicting whether implantation of a fertilized oocyte from a human female subject will result in pregnancy in a female subject following assisted reproductive technology comprising
  - (a) removing oocytes together with follicular fluid from a female subject;
  - (b) measuring the activity of matrix metalloproteinase-9 MMP-9 in the follicular fluid;
  - (c) predicting from the activity of matrix metalloproteinase-9 MMP-9 measured the probability of establishing pregnancy by in vitro fertilization-embryo transfer and
  - (c) fertilizing oocytes from a human female subject whose matrix metalloproteinase-9 MMP-9 activity is above a predetermined threshold level.

Claims 6-7 (canceled)

9. (new) The method according to claim 1, wherein the activity of matrix metalloproteinase 9 is measured by a matrix metalloproteinase-9 diagnostic kit comprising a protein substrate for matrix metalloproteinase -9, wherein said protein substrate is selected from the group consisting of collagen IV, collagen V, collagen VI, elastin, proteoglycan, and gelatin.

10. (new) The method according to claim 5, wherein the activity of matrix metalloproteinase 9 is measured by a matrix metalloproteinase-9 diagnostic kit comprising a protein substrate for matrix metalloproteinase -9, wherein said protein substrate is selected from the group consisting of collagen IV, collagen V, collagen VI, elastin, proteoglycan, and gelatin.